

12. (New) The information recording medium as claimed in claim 7, further comprising a bonding layer disposed between the translucent layer and the second recording layer.

13. (New) The information recording medium as claimed in claim 11, further comprising a bonding layer disposed between the translucent layer and the second recording layer.

REMARKS

Claims 2-6 have been examined. Claims 2-6 have been rejected under 35 U.S.C. § 112, second paragraph, and under 35 U.S.C. § 103(a).

I. Rejection under 35 U.S.C. § 112, second paragraph

Claims 2-6 have been rejected under 35 U.S.C. § 112, second paragraph, because the term “substantially” allegedly renders the claims indefinite. Applicants respectfully submit that the term is definite.

A. Arguments contained in Amendment filed February 25, 2002

In the previous Amendment, Applicants noted that terms such as “substantially equal” do not render a claim indefinite, as long as “one of ordinary skill in the art would understand what is claimed. . . in light of the specification” even if experimentation may be needed. Andrew Corp.

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v. Gabriel Electronics, Inc., 847 F.2d 819, 821 (Fed. Cir.), *cert denied*, 488 U.S. 927 (1988); see also, Cedarapids, Inc. v. Nordberg, Inc., 895 F.Supp. 1230, 1252 (N.D. Iowa 1995); U.S. Philips Corp., v. National Micronetics, Inc., 188 U.S.P.Q. 662, 667-8 (S.D.N.Y. 1976).

Furthermore, Applicants demonstrated that the present application provides an illustrative, non-limiting example of such use of phrase “substantially the same thickness” on page 11 of the present application. Specifically, page 11, lines 13-15, states that the thickness $dL1$ for a land L of the layer 2 is substantially equal to the thickness $dL2$ for a land L of the layer 5. Moreover, page 11, lines 18-23, describe an example of the thickness $dL1$ as being approximately $0.1039\ \mu\text{m}$ and describe an example of the thickness $dL2$ as being approximately $0.1196\ \mu\text{m}$.

B. Comments in the present Office Action and Applicants’ response

In the present Office Action, the Examiner maintains that the term “substantially”, as recited in the claims, is indefinite because the specification does not illustrate the range of thickness of the various lands or grooves. However, Applicants submit that the specification provides many examples and guidelines for the scope of the phrase “substantially the same thickness”. For example, Applicants would like to direct the Examiner’s attention to the illustrative equations on pages 19 and 20 of the present specification for calculating the thickness of features in various layers.

In light of the discussion above, Applicants submit that claims 2-6 are patentable under 35 U.S.C. § 112, second paragraph.

II. Rejection under 35 U.S.C. § 103(a) over U.S.P. 5,881,032 to Ito et al. (“Ito”)

Claims 2-6 have been rejected as being unpatentable under 35 U.S.C. § 103(a) over Ito. Applicants submit that the claims are patentable over the reference.

A. Claim 2

1. Arguments contained in Amendment filed February 25, 2002

In the previous Amendment, Applicants argued that claim 2 is patentable over the reference because Ito does not disclose or suggest the relative thicknesses of the grooves and lands in the first and second recording layers. In fact, on page 3 of the Office Action dated October 24, 2001, the Examiner acknowledged that Ito does not disclose such thicknesses but states, without any evidence, that thickness is a matter of optimization and that discovering optimum or workable ranges involves routine skill in the art. Applicants noted that the Court of Appeals for the Federal Circuit has strenuously held that such an unsupported statement is a “per se” rule that does not meet the Examiner’s burden set forth in 35 U.S.C. § 103(a) and cannot be relied upon by the Examiner in a prior art rejection based on obviousness. In re Ochiai, 71 F.3d 1565, 1572, 37 U.S.P.Q.2d (BNA) 1127, 1134 (Fed. Cir. 1995).

2. Comments in the present Office Action and Applicants' response

On pages 3 and 4 of the present Office Action, the Examiner states:

Applicant argues claim 2 is patentable over Ito because the cited prior art does not remotely disclose or suggest the relative thickness of the grooves and lands. Although Ito does not specifically disclose the thicknesses of the grooves or lands, thickness is result effective and are subsequently optimizable. The thicknesses of the information recording medium does not necessitate novelty of the claimed invention. Applicant failed to persuade the examiner why the cited art is unobvious over the claimed invention.

(Emphasis added). As noted above, the Examiner improperly maintains his reliance on the “per se” rule that thickness is a matter of optimization and that discovering optimum or workable ranges involves routine skill in the art. Other authority besides In re Ochai expressly disapproves of the use of per se rules or the unsupported characterization of certain features as “well known”.

Specifically, the Examiner indisputably bears the initial burden of establishing *prima facie* obviousness. M.P.E.P. § 2142. To establish a *prima facie* case of obviousness the Examiner must establish three things. First, that there is some suggestion or motivation, in either the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, the Examiner must show that there is a reasonable expectation of success in combining or modifying the references. Third, the Examiner must show that the prior art reference or references, or asserted teachings, teach or suggest all of the claim limitations in the rejected claims. See M.P.E.P. § 2143.

In the present case the Examiner has merely cited Ito and states that the claim limitations which it does not expressly disclose would have been obvious to one of ordinary skill in the art. However, as acknowledged by the Examiner, the reference does not disclose or teach all of the

features recited in claim 2. Thus, the Examiner must rely on the broad statement of obviousness, without citing or showing any reference disclosing these limitations. The Examiner has failed to show that these facts, asserted to be obvious, are capable of instant and unquestionable demonstration. See In re Ahlert, 424 F.2d 1088, 1091, 165 U.S.P.Q. 418, 420 (C.C.P.A. 1970).

Further, the Examiner seems to assert that it would have been obvious to modify Ito to come up with the limitations of the claimed invention. See Office Action dated October 24, 2001, page 3, asserting that

Ito does not disclose the thickness of recording layers and their components. Thickness is a matter of optimization. It would have been obvious to one of ordinary skill in the art to optimize the thicknesses since discovering optimum or workable ranges involves only routine skill in the art.

The mere fact that a reference can be modified does not make the resultant modification obvious unless the prior art also suggests the desirability of the modifications. See In re Mills, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). None of the cited prior art references disclose or suggest having the relative thicknesses of the grooves and lands or the desirability to form grooves and lands with such thicknesses.

Additionally, the Examiner's assertion that one of ordinary skill in the art would have known to adjust the thicknesses of the lands and grooves to produce an optimal result does not satisfy the Examiner's burden of proving obviousness. The mere fact that the claimed invention is within the capabilities or familiarities of one of ordinary skill in the art is not sufficient, by itself, to establish *prima facie* obviousness. See M.P.E.P. § 2143.01. Here, the mere assertion by the Examiner that one skilled in the art could have adjusted the thickness, because they were

familiar with the process of doing so, is insufficient to base an obviousness objection under 35 U.S.C. § 103(a).

Moreover, the characterization of certain claim limitations or parameters as obvious does not make the claimed invention, considered as a whole, obvious. It is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This burden can only be satisfied by an objective teaching in the prior art or by cogent reasoning that the knowledge is available to one of ordinary skill in the art. See In re Lalu, (747 F.2d 703, 223 U.S.P.Q. 1257 (Fed. Cir. 1984)). Furthermore, an Examiner may not rely on official notice, or judicial notice, or a mere statement of obviousness at an exact point where patentable novelty is argued, but must come forward with pertinent prior art. See Ex parte Cady, 148 U.S.P.Q. 162 (Bd. of App. 1965). Here one of the points of novelty is having the grooves and lands with the relative thicknesses. The Examiner has not cited, nor has the Applicant identified, any prior art which suggests or teaches this novel aspect found in claim 2.

Furthermore, pages 11-17 of the present specification describe an illustrative, non-limiting advantage of providing grooves and lands having the relative thicknesses. For example, page 17, lines 7-13, states:

As is described above, in this embodiment, since the relationships $dG1 > dL1$ and $dG2 > dL2$ are established between the thicknesses $dG1$ and $dG2$ of the grooves G and the thicknesses $dL1$ and $dL2$ of the lands L of the first and second recording layers 2 and 5, the recorded information can be precisely reproduced, and accordingly, a DVD-R having a high density can be provided.

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Since the Examiner has failed to provide any proof whatsoever of the claimed thicknesses of the grooves and lands, Applicants submit that claim 2 is patentable.

B. Claims 3-6

Since claims 3-6 depend upon claim 2, Applicants submit that they are patentable at least by virtue of their dependency.

III. Newly added claims

Applicants have added new claims 7-13 to more fully define the present invention.

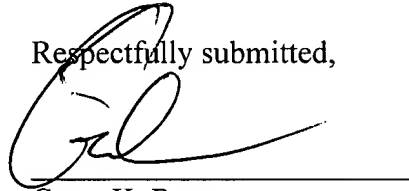
IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'GR' followed by a long horizontal stroke, positioned above a solid horizontal line.

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Date: August 8, 2002